

IN THE CLAIMS

A clean copy of the claims incorporating any amendment is shown below.

Please amend Claims 1-13 as follows:

1. (Amended) A process for fabricating a structure comprising a carrier substrate and a layer of semiconductor material on one surface of the carrier substrate, the process comprising the following successive steps:

- a) forming a layer of semiconductor material on one surface of a first substrate;
- b) implanting ions in the first substrate under said one surface in the vicinity of the layer of semiconductor material to form a cleavage zone which delimits a superficial layer in the first substrate in contact with the layer of semiconductor material;
- c) transferring the first substrate with the layer of semiconductor material onto the carrier substrate while leaving the superficial layer in contact with the layer of semiconductor material, the layer of semiconductor material being made integral with the carrier substrate;
- d) providing energy to cause cleavage of the first substrate along the cleavage zone, the superficial layer of the first substrate remaining integral with the layer of semiconductor material and the carrier substrate during the cleavage; and
- e) removing said superficial layer left over the layer of semiconductor material to uncover the layer of semiconductor material.

2. (Amended) A process according to claim 1, wherein the step d) comprises supplying the energy in a form of at least one of thermal energy and mechanical energy.

3. (Amended) A process according to claim 1, wherein the step e) comprises at least one of wet chemical etching, dry chemical etching, polishing, and oxidation followed by etching.

4. (Amended) A process according to claim 1, wherein the first substrate is a silicon substrate and the layer of semiconductor material is a layer of silicon carbide.

5. (Amended) A process according to claim 4, wherein the layer of silicon carbide is obtained by causing the silicon substrate to react with a hydrocarbon.

6. (Amended) A process according to claim 1, further comprising forming an insulator layer on the layer of semiconductor material before the step b).

7. (Amended) A process according to claim 1, wherein:

the carrier substrate has a superficial insulator layer; and

the step c) comprises transferring the first substrate with the layer of semiconductor material onto the superficial insulator layer of the carrier substrate.

8. (Amended) A process according to claim 7, wherein the superficial insulator layer is an oxide.

9. (Amended) A process according to claim 1, further comprising forming epitaxial growth of the same semiconductor material on the layer of semiconductor material after the step e) in order to increase the thickness of the layer of semiconductor material.

10. (Amended) A process according to claim 4, further comprising forming a layer of GaN on the layer of silicon carbide after the step e).

11. (Amended) A process according to claim 1, wherein the layer of semiconductor material is made integral with the carrier substrate by heat treatment.

12. (Amended) A process according to claim 11, wherein said heat treatment, to render the layer of semiconductor material integral with the carrier substrate, is extended to additionally cause the cleavage of the step d).

13. (Amended) A process according to claim 6, wherein the insulator layer is an oxide.